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PROPOSED DECISION

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Decision **PROPOSED DECISION OF ALJ HYMES** (Mailed 2/21/14)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Enhance
the Role of Demand Response in Meeting
the State's Resource Planning Needs and
Operational Requirements.

Rulemaking 13-09-011
(Filed September 19, 2013)

**DECISION ADDRESSING FOUNDATIONAL ISSUE OF THE BIFURCATION OF
DEMAND RESPONSE PROGRAMS**

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DECISION ADDRESSING FOUNDATIONAL ISSUE OF THE BIFURCATION OF DEMAND RESPONSE PROGRAMS**1. Summary**

This decision conceptually bifurcates the Commission-regulated demand response portfolio of programs into two categories: 1) load modifying resources, which reshape or reduce the net load curve; and 2) supply resources, which are integrated into the California Independent System Operator (CAISO) energy markets. We clarify that the adoption of bifurcation is conceptual at this time for purposes of studying the two categories. Operational bifurcation will occur beginning with the 2017 demand response program year.

When the Commission initiated Rulemaking 13-09-011, we stated that we would review and analyze current demand response programs to determine whether and how we should bifurcate programs with the ultimate goal of prioritizing demand response as a utility-procured resource, competitively bid into the CAISO energy markets. Bifurcation will allow the Commission to focus our review separately on these two very distinct but equally important categories of demand response.

We reiterate that the Commission's goals are to improve the efficiency of demand response and increase the use of all demand response programs; but there is no intention to diminish the value of demand response in either category.

In a future ruling, we will provide parties guidance on the issues to be addressed in testimony, including a demand response auction mechanism that proposes to assist the Commission in increasing demand response participation in the CAISO energy market.

2. Procedural Background

The Commission initiated Rulemaking (R.) 13-09-011 with the intent to enhance the role of demand response in meeting the State's resource planning needs and operational requirements. The Order Instituting Rulemaking (OIR) named Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SCE) (jointly, the Utilities) as respondents and parties to the proceeding.

The assigned Administrative Law Judge (ALJ) held a prehearing conference on October 24, 2013 to discuss the potential scope and schedule for this proceeding. Subsequently, the ALJ and assigned Commissioner issued a joint ruling and scoping memo on November 14, 2013 (Scoping Memo), which explained that the proceeding would be carried out in phases with Phase One focused exclusively on the issue of bridge funding and Phase Two focused on foundational issues. The Scoping Memo also directed parties to respond to several questions regarding foundational issues in the proceeding, including the issue of bifurcation of the demand response programs. On December 13, 2013, parties filed responses to the questions; parties filed replies to those responses on December 30 and 31, 2013.

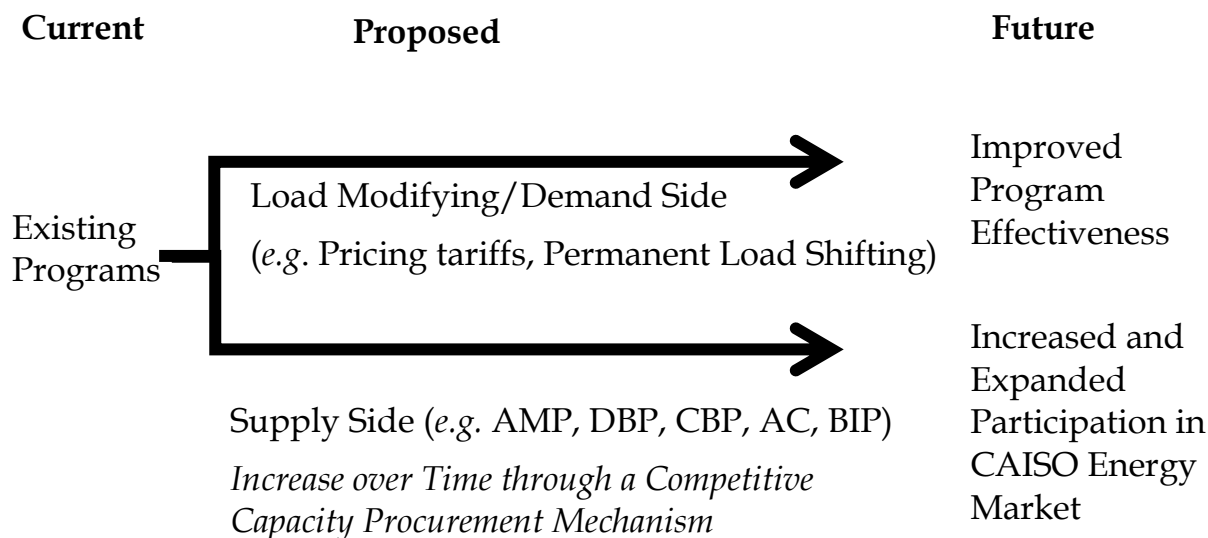
3. Issues Before the Commission

We address one issue in this decision: whether and how to bifurcate demand response programs.¹ Parties were asked to address the following questions to assist us in developing a determination:²

¹ Other foundational questions will be addressed in future decisions.

² Scoping Memo at Attachment 1.

- i. In the OIR, the Commission proposes to bifurcate the current demand response programs into demand-side and supply-side resources. (See Figure 1 below for the proposed realignment.) The OIR defines the demand-side programs as customer focused programs and rates, and supply side resources as reliable and flexible demand response that meets local and system resource planning and operational requirements. Please comment on the terms, demand-side and supply-side resources, and the definitions provided. If you disagree with the terms and/or definitions, please provide your recommended changes and explain why your recommendation is more appropriate.

Figure 1³

- i. Are there any potential problems or concerns with the proposed bifurcation or realignment of demand response

³ Attachment 1 of the Scoping Memo included Figure 1 as a representation of how the Commission could bifurcate demand response programs. Figure 1 is provided here as illustrative and not meant to be representative of adopted policy.

programs into demand-side and supply-side resources? For example, are there any legal issues or other concerns such as missed opportunities for integration?

- ii. The OIR describes an ongoing tension between the supply-side and demand-side requirements for demand response. The OIR states that demand response as resource adequacy resources are held to the same requirements as generation resources for system reliability and economic efficiency. Simultaneously, the needs and technical capabilities of customers and providers should also be considered in program design. How could the proposed bifurcation or realignment of supply-side and demand-side resources be designed to serve both sets of requirements?
- iii. What role, if any, will the load impact protocol serve in this realignment? Are revisions required? Should the Commission develop separate sets of evaluation criteria and/or processes for the demand and supply sides?

The following parties filed comments and/ or replies to the questions in the Scoping Memo: the California Clean Energy Committee (CCEC), the California Energy Storage Alliance (CESA), the California Independent System Operator Corporation (CAISO), the California Large Energy Consumers Association (CLECA), the Center for Energy Efficiency and Renewable Technologies (CEERT), Clean Coalition, the Consumer Federation of California (CFC), Direct Access Customer Coalition/ Alliance for Retail Energy Markets (DACC/ AReM), EnerNOC, Inc./ Johnson Controls, Inc./ Comverge, Inc. (together, the Joint Demand Response Parties), Environmental Defense Fund (EDF), Marin Clean Energy (MCE),⁴ Authority, Natural Resources Defense

⁴ On December 31, 2013, MCE filed a notice advising the Commission that on December 5, 2013, the Marin Energy Authority (MEA) adopted the name Marin Clean Energy (MCE) for its Community Choice Aggregation program. MCE will be the entity

Footnote continued on next page

Council (NRDC), the Office of Ratepayer Advocates (ORA), Olivine, Inc., PG&E, SDG&E, Sierra Club, SCE, Stem, Inc./SolarCity Corporation, and The Utility Reform Network (TURN).

4. Discussion

When the Commission initiated this proceeding, we made clear our intention to prioritize demand response as a utility-procured resource, competitively bid into the CAISO energy market.⁵ However, as has been echoed by several parties during this proceeding, the Commission will insure that we do not devalue current demand response programs.⁶ With this decision, we move forward with our original intention to “retool demand response to align with the grid’s needs and enhance the role of demand response.”⁷

In order to move forward, we first conclude that concerns regarding the impact of bifurcation must be addressed prior to the implementation of bifurcation of demand response programs, but should not cause us to abandon the concept of bifurcation, especially during our review of these programs. These concerns related to resource adequacy, jurisdiction and market integration costs are discussed below and will be addressed during the course of this proceeding. Second, we find that it is reasonable to bifurcate the demand response portfolio of programs into two categories: 1) load modifying resources; and 2) supply resources, as discussed and defined below. Bifurcation will allow the

submitting filings to the Commission on behalf of MCE and MEA. Prior filings from MEA will now be considered as filed by MCE.

⁵ OIR at 2.

⁶ *Id.* at 15.

⁷ *Ibid.*

Commission to separately review the two very distinct types of demand response: that which modifies the load by indirectly reducing the resource adequacy requirement and that which supplies the grid as a flexible capacity resource, a balancing energy and ancillary service resource, or an alternative to transmission upgrades.⁸ However, we confirm that operational bifurcation will not begin until the 2017 demand response program year.

We take this opportunity to reiterate that the Commission goals are to improve the efficiency of demand response and increase the use of all demand response programs—both those that are bid into the CAISO energy markets and those that are not. As we stated in the OIR, “there is no intention to diminish the value of retail demand response, but rather to take advantage of the strengths of different demand response programs.”⁹

4.1. Concerns Regarding the Impact of Bifurcation

4.1.1. Summary

Parties expressed concerns regarding the impacts of bifurcation on related issues such as the costs of CAISO energy markets integration,¹⁰ jurisdiction,¹¹ and resource adequacy qualifications.¹² As discussed below, we find that these issues should not cause us to abandon the bifurcation of demand response programs. However, we are cognizant that policies regarding resource adequacy,

⁸ OIR at 8.

⁹ OIR at 15.

¹⁰ See, for example, CLECA Response at 9-10; Joint DR Parties Response at 5-6; and PG&E Response at 7.

¹¹ See, for example, CLECA Response at 11-13 and PG&E Response at 10-11.

¹² See, for example, ORA Response at 3; PG&E Response at 11; and SCE Response at A-3 to A-4.

jurisdiction, and market integration costs must be reviewed and addressed prior to operational bifurcation in order to coordinate and implement the new vision for demand response. As further discussed throughout this decision, a ruling will be issued to provide parties with guidance for commenting on these issues in testimony.

4.1.2. Costs of CAISO Energy Markets Integration

In opening comments, parties pointed to the costs of integration with the CAISO energy markets as a potential barrier to participation in demand response programs. CLECA states that current CAISO requirements, such as the settlement process and telemetry requirements are expensive and burdensome. CLECA claims that without changes to the requirements, the costs of bidding demand response into the CAISO energy markets will deter participation.¹³ PG&E agrees that costs are prohibitive but suggests that improvements could be made. In its response to the Scoping Memo, PG&E lists several potential modifications to existing demand response products that could reduce costs and operational risks of providing these services, such as: simplifying telemetry requirements, easing master file update requirements for supply-side demand response resources, and reducing the restrictions on customer enrollments.¹⁴

In comments to the proposed decision, CAISO contends that many concerns regarding costs are based on misinformation.¹⁵ For example, the CAISO clarifies that it allows for aggregation of performance data from the individual loads at the resource level and that the Base Interruptible Program does not

¹³ CLECA Response at 9.

¹⁴ PG&E Response at 13.

¹⁵ CAISO Comments on Proposed Decision at 4.

require telemetry.¹⁶ Additionally, the CAISO notes in comments to the proposed decision that “little, if any, substantiated or independently verified cost and labor data concerning demand response integration in the wholesale market has been entered into the record of this proceeding or any other Commission proceeding.”¹⁷

CAISO’s comments regarding potential misinformation makes it clear that the Commission needs to further develop the record on the true costs and barriers of market integration. However, PG&E’s suggestions regarding costs lead us to recognize that there are plausible solutions to the CAISO energy market integration costs concerns. As such, we find the cost concerns should not deter us from moving forward with conceptual bifurcation at this time. We agree with parties that the Commission must continue to explore ways to decrease CAISO market integration costs prior to full implementation of any new vision for demand response, including bifurcation. As such, a ruling will be issued providing parties with guidance on the issues to address in testimony; CAISO market integration costs will be included in the list of issues.

4.1.3. Jurisdiction

In their responses to the Scoping Memo, CLECA and PG&E examined the issue of jurisdiction. PG&E contends that “demand response bid into the CAISO market could become [Federal Energy Regulatory Commission (FERC)] jurisdictional in whole or in part” diminishing the Commission’s control in meeting California policies.¹⁸ CLECA adds that FERC has jurisdiction over

¹⁶ *Id.* at 5-6.

¹⁷ *Id.* at 4.

¹⁸ PG&E Response at 10.

wholesale market prices and that some states have been denied the ability to exempt preferred resources from such markets.

CLECA suggests that the Commission develop a utility-run voluntary preferred resources auction in order to avoid the jurisdictional issue.¹⁹ CLECA further suggests that the Commission develop a reverse auction approach similar to the Renewable Auction Mechanism (RAM), which would rely on a market mechanism compatible with FERC's rate-setting in wholesale markets but avoids or eliminates the jurisdictional issue.²⁰ CLECA states that this warrants serious consideration as a more-viable market mechanism for demand response procurement that preserves Commission jurisdiction, as opposed to a CAISO-run auction.²¹

We find the issue of jurisdiction is relevant and must be addressed but should not prevent the Commission from moving forward with the adoption of conceptual bifurcation. Furthermore, we find it reasonable to explore the idea of a reverse auction mechanism for demand response in this proceeding. We discuss the mechanism further in section 4.3 below. Additionally, parties will be provided an opportunity to respond to questions on jurisdiction and the auction mechanisms in testimony. As we alluded to in a prior discussion, a ruling providing guidance on testimony will be issued in the near future.

4.1.4. Resource Adequacy Issue

Setting resource adequacy capacity for demand response resources has been and should continue to be resolved in the resource adequacy proceeding.

¹⁹ CLECA Response at 11-13.

²⁰ *Id.* at 13.

²¹ *Ibid.*

However, several parties revealed issues they consider must be resolved prior to implementation of bifurcation.

ORA points out that not all demand response programs are capable of meeting the requirements for participation in the energy market but can decrease the conventional general capacity procurement and thus qualify for resource adequacy credit.²² PG&E contends that there are tensions between the demand side and supply side of demand response as it pertains to the treatment of each category in the context of resource adequacy. PG&E explains that, prior to Decision 12-06-025, demand response reduced the resource adequacy requirement but now demand response is treated as resource adequacy supply that can meet the resource adequacy requirement.²³ PG&E argues that bifurcation should allow both categories of demand response to be treated equally depending upon whether or not it is bid into the CAISO wholesale market.²⁴

SDG&E claims that the resource adequacy value of supply side demand response could be diminished if more demand response moves to the CAISO energy market. SDG&E also claims uncertainty about the impact of bifurcation on load modifying demand response as it relates to load forecasting and resource adequacy requirements.²⁵ SDG&E cautions that any decrease in the ability to lower overall resource adequacy procurement relative to today's framework will

²² ORA Response at 3.

²³ PG&E Response at 11.

²⁴ *Ibid.*

²⁵ SDG&E Response at 5.

impact the value and compensation of load modifying demand response going forward.²⁶

In comments to the proposed decision, ORA expressed concern regarding a staff proposal for resource adequacy noting that the process of transitioning demand response supply resources may not meet the resource adequacy requirements by 2015, as proposed by staff. First, the process that ORA references in its comments is a proposal and has not been adopted by the Commission. Second, the proposal recommends a “bucket” for supply resources, while maintaining the resource adequacy “buckets” for programs as they are today. Third, operational bifurcation of demand response programs will not begin until 2017.

As we stated above, setting resource adequacy capacity for demand response resources has been and should continue to be resolved in the resource adequacy proceeding. We find that there is confusion regarding the interplay between resource adequacy and demand response. However, a better understanding of this interplay should resolve many concerns of parties. Furthermore, we conclude that the resource adequacy concerns do not create a barrier to the adoption of conceptual bifurcation. We confirm that the concerns related to resource adequacy must be addressed and resolved prior to implementation of operational bifurcation and the new vision for demand response.

²⁶ *Ibid.*

4.2. Bifurcation of Demand Response

Parties were generally supportive of the idea of bifurcation;²⁷ but several expressed caution regarding the potential siloing or devaluation of programs on either side of the bifurcation.²⁸ We acknowledge this concern. However, as discussed below, we find it is one that can be addressed and, as is true with the issues discussed in section 4.1, should not prevent us from moving forward with bifurcation. As stated in the OIR, bifurcation can help us focus on the strengths of the two demand response categories to improve the efficiency and effectiveness of demand response, and increase the amount of overall load shed. Moreover, as some parties claim, and we agree, bifurcation can assist the Commission in terms of improving resource adequacy and planning, as well as administrative efficiencies.²⁹

ORA cautions that the Commission should ensure that the bifurcation of demand response programs do not create silos that limit how a customer participates or what program information a customer receives.³⁰ CEERT

²⁷ See, for example, Comments of CESA Response on Scoping Memo, December 13, 2013 at 1-4; Response of the CAISO to the Phase Two Foundational Questions, December 13, 2013 at 2-3; CFC Response to Phase Two Foundational Questions, December 13, 2013 at 2-3; ORA Response to Phase Two Foundational Questions, December 13, 2013 at 1-3; Response of PG&E to Scoping Memo, December 13, 2013 at 3; Response of SDG&E to Phase Two Foundational Questions, December 13, 2013 at 3; Sierra Club Response to Phase Two Foundational Questions, December 13, 2013 at 6 and Responses of TURN to Phase Two Foundational Questions Concerning Bifurcation and Cost Allocation, December 13, 2013 at 2.

²⁸ See, for example, Response of CEERT to Phase Two Foundational Questions, December 13, 2013, Response of CLECA to Phase Two Foundational Questions, December 13, 2013 at 4; ORA Response at 3; and SDG&E Response at 4-5.

²⁹ CFC Response at 3. See also, PG&E Response at 3.

³⁰ ORA Response at 4.

contends that bifurcation will almost assuredly lead to piecemeal or siloed treatment of demand response programs.³¹ In a similar vein, CLECA expresses concern that bifurcation will devalue both categories of demand response programs. While neither ORA nor CEERT provide any facts that siloing will occur, we consider both the siloing and devaluing concerns to be valid but addressable.

We conclude that there are no known reasons not to move forward with the adoption of conceptual bifurcation. We agree that the prevention of siloing, as well as the issues previously discussed, must be addressed prior to implementation of program bifurcation and the new vision of demand response. We find it reasonable to approve the concept of demand response bifurcation so that we can study each category separately. We next address the terms and definitions for bifurcation categories.

4.2.1. Bifurcation Terms and Definitions

4.2.1.1. Summary

Most parties asserted that the proposed terms of demand side and supply side demand response were unclear and many claimed that the terms, as defined in the OIR, could lead to confusion.³² As discussed below, we find it reasonable to revise the terms proposed in the OIR and adopt clearer definitions.

While some parties suggested that the Commission merely needed to better define the terms, demand side and supply side, several parties offered alternate terms and definitions. Table 1 provides a list of revised definitions for

³¹ CEERT Response at 4.

³² See, for example, SCE Comments to Phase Two Foundational Questions, December 13, 2013 at A-1; ORA Response at 1-2; CLECA Response at 2.

demand side and supply side as well as recommended alternate bifurcation terms and their definitions.

Table 1 Recommended Bifurcation Terms and Definitions		
Party	Term (1) and Definition	Term (2) and Definition
CAISO	Demand Side – A resource that reshapes the net load curve. ³³	Supply Side – a resource that can be scheduled and dispatched when needed, where needed, and for a megawatt needed. ³⁴
Clean Coalition	Local Reliability – programs designed to improve reliability within a utility’s distribution system or within a substation. ³⁵	Bulk System Reliability – programs designed to ensure the reliability of the CAISO system. ³⁶
Joint Demand Response Parties	Retail programs – dispatched by the utility based upon the dispatch parameters that describe the programs. ³⁷	Wholesale DR resources – dispatched based upon price and by the CAISO. ³⁸
EDF	Demand Side – resources that are load modifiers and are reflected in the CAISO load forecast. ³⁹	Supply Side – resources that are only triggered when needed. ⁴⁰

³³ CAISO Response at 4.

³⁴ *Id.* at 6.

³⁵ Clean Coalition’s Comments on Phase 2 Foundational Questions, December 13, 2013 at Section II.

³⁶ *Ibid.*

³⁷ Joint Response of Joint DR Parties on Phase 2 Foundational Questions, December 13, 2013 at 4.

³⁸ Joint DR Parties Response at 3.

³⁹ Responses to Phase Two Foundational Questions of Environmental Defense Fund, December 13, 2013 at 6.

Table 1 Recommended Bifurcation Terms and Definitions		
Party	Term (1) and Definition	Term (2) and Definition
ORA	Demand Side – load modifiers that change load shape and are embedded in the California Energy Commission’s (CEC) load forecast that system operators are required to plan for and meet. ⁴¹	Supply Side – programs that are used as resources to meet the demand forecast and can meet load and system resource planning and operational requirements. ⁴²
PG&E	Demand Side (or load modifiers) – resources not bid into the CAISO energy markets or dispatched through the CAISO energy markets as a generation-like product. ⁴³	Supply Side – resources bid into the CAISO energy markets and dispatched through the CAISO energy markets as a generation-like product (<i>e.g.</i> , Proxy Demand Resource, Reliability Demand Response Resource, Participating Load, etc. ⁴⁴
SDG&E	Load-Modifying – all other demand response. ⁴⁵	Supply Side - demand response that qualifies as a resource adequacy resource, providing local, flexible, and/or system capacity. ⁴⁶
Sierra Club	DR-C Resources – primarily targeting customer behavior	DR-S Resources – primarily supporting CAISO’s system

⁴⁰ *Ibid.*⁴¹ ORA Response at 1.⁴² *Id.* at 2.⁴³ PG&E Response at 4.⁴⁴ *Id.* at 3.⁴⁵ SDG&E Response at 2.⁴⁶ *Ibid.*

Table 1 Recommended Bifurcation Terms and Definitions		
Party	Term (1) and Definition	Term (2) and Definition
	and involving programs, tariffs, and consumer behavioral changes not presently amenable to acquisition through market-based competitive mechanisms. ⁴⁷	planning and operations and amenable to acquisition through market-based mechanisms. ⁴⁸
SCE	Load Modifiers – programs that cannot be bid into the CAISO wholesale electric market. ⁴⁹	Supply Resources – customer programs that meet the operational criteria to be bid into the CAISO wholesale electric market for grid management purpose. ⁵⁰
Stem, Inc./SolarCity	Demand Side – programs that are non-dispatchable into the CAISO market. ⁵¹	Supply Side – programs that are dispatchable into the CAISO market. ⁵²

One of the most debated issues by parties involves the proposed definition of demand side demand response programs: customer-focused programs and rates. We agree with several commenters that all demand response programs are customer-focused and that our originally-proposed definition of demand side programs being customer-focused unintentionally implied that supply side

⁴⁷ Sierra Club Response at 4.

⁴⁸ *Ibid.*

⁴⁹ SCE Response at A-3.

⁵⁰ *Id.* at A-2.

⁵¹ Stem, Inc. and SolarCity Comments on the Assigned Commissioner and ALJ Ruling and Scoping Memo, December 13, 2013 at 3.

⁵² *Ibid.*

programs would not be customer-focused.⁵³ Thus, as discussed below, we find it is reasonable to revise the bifurcation terms and improve the definitions of bifurcation in order to eliminate this and other confusion.

4.2.1.2. Bifurcation Terms

First, we discuss the terms to be used in bifurcation. CLECA suggested that in determining the bifurcation categories, the Commission should focus on the services that demand response programs provide.⁵⁴ Others suggested looking at reliability needs,⁵⁵ or whether or not programs will be bid into the CAISO market.⁵⁶ Similar to CLECA, ORA recommends that the Commission bifurcate based on the specific purpose a demand response program serves.⁵⁷

Looking at our stated goal for this proceeding – to enhance the role of demand response programs in meeting the state’s long-term energy goals while maintaining system and local reliability – we identify two roles for demand response programs. The first role is to meet the state’s long-term energy goals including those for renewable and low greenhouse gas emitting resources.⁵⁸ In comments, the CAISO provides further support for this role by explaining that the “Commission’s over-arching purpose for authorizing ratepayer funding of demand response and energy efficiency programs is to fulfill the loading

⁵³ See, for example, CLECA Response at 2; ORA Response at 1-2; and PG&E Response at 4.

⁵⁴ CLECA Response at 3.

⁵⁵ Clean Coalition Response at IIa.

⁵⁶ See, for example, Joint DR Parties Response at 3; PG&E Response at 3-4; and SCE Response at A-2 – A-3.

⁵⁷ ORA Response at 1.

⁵⁸ OIR at 1.

order.”⁵⁹ Furthermore, the CAISO states that the purpose of the loading order is to avoid or defer building new conventional-generation infrastructure thereby reducing greenhouse gas emissions.⁶⁰ The second role of demand response is to maintain both system and local reliability.⁶¹ To support this, TURN indicates that demand response has primarily been used for reliability purposes.⁶²

Using the recommended terminology in Table 1,⁶³ we conclude that the more appropriate terms to use for the bifurcation of the programs to meet the two roles of demand response are Load Modifier and Supply Resource.⁶⁴ However, in comments to the proposed decision, Olivine suggested a minor revision from Load Modifier to Load Modifying Resource, for grammatical similarity.⁶⁵ We find the terms, Load Modifying Resource and Supply Resource, to be reasonable and we adopt them.

4.2.1.3. Bifurcation Definitions

We now turn to a discussion of the definitions of the two bifurcation terms. As presented in Table 1, parties offered varying definitions to describe Load Modifying Resource and Supply Resource. For example, (although it

⁵⁹ CAISO Response at 2-3.

⁶⁰ *Ibid.*

⁶¹ OIR at 8.

⁶² TURN Response at 2.

⁶³ See, for example, PG&E, SDG&E and SCE’s recommended terminology.

⁶⁴ Additionally, CLECA makes reference to the terms, load modifier and resource, in its comments. Most notably, CLECA contends that “whether or not [demand response] is bifurcated, it is very important that [demand response] be reflected in resource planning and resource adequacy, whether as a load modifier or a resource.” See CLECA Response at 3.

⁶⁵ Olivine Comments to Proposed Decision at 1.

recommends maintaining the term, demand side) the CAISO provides the definition, “reducing the amount of net load that must be served,”⁶⁶ which is similar to ORA’s definition, which states, “load modifiers change the load shape and are embedded in the California Energy Commission’s load forecast.”⁶⁷ ORA contends that its definition better aligns the requirements of programs that would fall into this category based on the specific purpose it serves.⁶⁸

We agree that the Commission should define the bifurcation terms to align with the requirements or purposes of demand response programs. As such, we find the following definitions of Load Modifying Resource and Supply Resource to be reasonable and adopt them. Load Modifying demand response is a resource that reshapes or reduces the net load curve.⁶⁹ Supply Resource demand response is a resource that is integrated into the CAISO energy markets.⁷⁰

4.2.2. Bifurcation of Demand Response Programs

Our next step is to determine in which of the two bifurcation categories each demand response program should be located. At this time, we find that the Commission needs additional information to categorize each program. As discussed below, parties should be given an opportunity to comment on the initial assessment of the categorization as provided in Table 2.

⁶⁶ CAISO Response at 2.

⁶⁷ ORA Response at 1.

⁶⁸ Ibid.

⁶⁹ See Table 1 recommendations from the CAISO, EDF, and ORA.

⁷⁰ See Table 1 recommendations from the CAISO, ORA, PG&E, Sierra Club, SCE, and Stem, Inc./Solar City.

Table 2 Proposed Bifurcation of Demand Response Programs	
Load Modifying Resources	Supply Resources
Critical Peak Pricing (CPP) Time of Use (TOU) Rates Permanent Load Shifting (PLS) Real Time Pricing (RTP), and Peak Time Rebate (PTR)	Aggregator Managed Programs (AMP) Demand Bidding Program, (DBP), Capacity Bidding Program (CBP), Air Conditioner (AC) Cycling, Agricultural Pumping Interruptible (API), and Base Interruptible Program (BIP)

Several parties expressed opposition to categorizing programs at this point in the proceeding. CEERT and EDF contend that the Commission must first define the attributes or characteristics of the various types of demand response resources.⁷¹ PG&E stated that the decision to bid into the CAISO market should be a business decision based on economics.⁷² In support of categorizing the demand response programs now, the CAISO stated that “a resource adequacy double counting problem occurs if demand response is not clearly classified as either a supply-side or demand-side resource.”⁷³ The CAISO also claims that if Supply Resources are withheld from the market, they cannot be optimized and do not contribute to price formation in the wholesale market.

While we find CAISO’s remarks noteworthy, we agree with comments to the proposed decision that the record for determining the categorization of each demand response program is not adequate. For example, PG&E remarked that

⁷¹ CEERT Response at 4 and EDF at 6.

⁷² PG&E Response at 4.

⁷³ CAISO Response at 10.

the Scoping Memo addressed questions regarding bifurcation categories, legal concerns and resource adequacy, but the questions never suggested that a decision would be made regarding the categorization of each demand response program.⁷⁴ We agree.

We find that the Commission must continue to review the demand response programs to determine the categorization of each program. In the anticipated ruling discussed throughout this decision, we will include guidance regarding testimony on the categorization of demand response programs. We will use Table 2 as a starting point for future discussions.

In its comments regarding categorization, the CAISO contends that, as the balancing area authority, it must have full oversight of the system and, as such, any other entity that dispatches their supply-side demand response will do so sub-optimally, resulting in power imbalances and re-dispatching costs.⁷⁵ However, CLECA states that the Utilities use demand response program to address distribution system reliability problems, thus highlighting the importance that the CAISO cannot have exclusive control of demand response.⁷⁶

In comments to the proposed decision, the CAISO stated that it has no desire to have exclusive control of all demand response programs.⁷⁷ We agree that the CAISO cannot have exclusive control of demand response. Demand response must be available to address local issues as well as system wide issues.

⁷⁴ PG&E Comments to Proposed Decision at 2.

⁷⁵ CAISO Response at 11.

⁷⁶ CLECA Reply at 4.

⁷⁷ CAISO Response at 9.

4.3. Next Steps

As we previously stated, one of the reasons the Commission is moving forward with the bifurcation of demand response programs is to “prioritize demand response as a utility-procured resource, competitively bid into the California Independent System Operator wholesale electricity market.” While no party flatly opposes CAISO energy market integration, parties have expressed concern with the currently proposed process, cautioning that “determining which programs are most compatible with the wholesale market is a complex and nuanced process that must take into account a multitude of programmatic and customer-specific details, balanced against the requirements of the various [CAISO] markets models and products.”⁷⁸

For example, Olivine states that “relying too heavily on an approach that stresses all-or-nothing program integration without taking into account the deeper variables that makes for wholesale market compatibility will lead to unnecessary effort and missed opportunities.”⁷⁹ Furthermore, PG&E contends that the decision regarding which side of the bifurcation demand response programs are categorized should be a business decision based on market conditions and economics. PG&E concludes that allowing demand response to “show up where it is most economical to do so will optimize the amount of demand response in the market.”⁸⁰ We agree that bidding demand response into

⁷⁸ Response of Olivine, Inc. to Foundational Questions in OIR to Enhance the Role of Demand Response in Meeting the State’s Resource Planning Needs and Operational Requirements, December 13, 2013 at 2.

⁷⁹ *Ibid.*

⁸⁰ PG&E Response at 4.

the CAISO energy markets is a complex process and should be based on many factors.

Bidding demand response into the CAISO energy markets has been an objective of the Commission since the initiation of R.07-01-041 in 2007.⁸¹ The Commission has moved forward with directing the utilities to revise their tariffs to allow retail customers to bid demand response into the CAISO energy markets⁸² and authorized the utilities to bid demand response into the market.⁸³ To our dismay, very little demand response capacity has been integrated into the CAISO's markets to date.⁸⁴ But how much demand response should be bid into the CAISO market? What are our goals for either side of bifurcation and, how do we get there from here?

Previously, we discussed a suggestion by the parties that the Commission develop an auction mechanism to bid demand response into the CAISO energy market. As is the case with the current renewable auction mechanism, the proposed demand response auction mechanism would be run by the utilities to ensure the Commission maintains authority over its implementation. We find the recommendation a good starting point for exploration.

A proposal for the auction mechanism will be introduced through a ruling following the issuance of this decision. Parties will be asked to comment on the

⁸¹ In that rulemaking, the Commission determined that it would consider modifications to demand response programs needed to support CAISO efforts to incorporate demand response into market design protocols. *See*, OIR at Goal 4.

⁸² D.10-06-003 at 1.

⁸³ D.10-06-002 at 1. However, PG&E has successfully bid a small amount of demand response into the CAISO energy market through a pilot project.

⁸⁴ OIR at 14.

auction mechanism and its viability as a tool to increase the amount of demand response bid into the CAISO wholesale market. In comments to the proposed decision, the CAISO and MCE both suggested alternatives to the auction mechanism. The CAISO cautioned that a reverse auction “generally does not provide robust price discovery.”⁸⁵ MCE suggested that the Commission consider the role of non-utility LSE’s in developing the auction proposal.⁸⁶ We welcome these ideas. In addition to the mechanics of the proposed auction, the ruling will ask for comments and responses to questions on auction mechanism alternatives.

To reiterate, following the issuance of this decision, the assigned Commissioner and ALJ in this proceeding will jointly issue a ruling that will contain guidance for the issues that parties should address in testimony. Those issues will include: CAISO market integration costs, resource adequacy, the prevention of siloing, comments on the bifurcation of demand response programs as proposed in Table 2, comments on the proposed auction mechanism and alternatives, and how to determine the goals of demand response for both categories of bifurcation.

5. Comments on Proposed Decision

The proposed decision of the ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission’s Rules of Practice and Procedure. Comments were filed on March 13, 2014 by the CAISO, CESA, CLECA, CEERT, Clean Coalition, EDF, Joint Demand Response Parties, MCE, ORA, Olivine, PG&E, SDG&E, Sierra Club, and SCE. Replies were filed on March 18, 2014 by

⁸⁵ CAISO Comments to the Proposed Decision at 8.

the CAISO, CLECA, CEERT, Joint Demand Response Parties, ORA, PG&E and SCE. Additions and revisions have been made throughout the decision as appropriate in response to the comments received.

6. Assignment of Proceeding

Michael R. Peevey is the assigned Commissioner and Kelly A. Hymes is the assigned ALJ in this proceeding.

Findings of Fact

1. Parties were generally supportive of the idea of bifurcation but expressed concerns.
2. The concern of potential siloing or devaluation of demand response programs can be addressed prior to implementation of bifurcation but should not prevent the Commission from adopting bifurcation.
3. Bifurcation can assist the Commission in terms of improving resource adequacy and planning, as well as administrative efficiencies.
4. Bifurcation can assist the Commission to focus on the strengths of each demand response category to improve the effectiveness of demand response and increase the amount of overall load shed.
5. All demand response programs are customer-focused.
6. The originally-proposed definition of demand side programs being customer-focused unintentionally implied that supply side programs would not be customer-focused.

⁸⁶ MCE Comments to the Proposed Decision at 3-4.

7. There are two roles for demand response programs: 1) to meet the state's long-term energy goals including those for renewable and low greenhouse gas emitting resources; and 2) to maintain both system and local reliability.

8. Demand response must be available by the Utilities to address local issues, as well as system wide issues.

9. The CAISO cannot have exclusive control of demand response.

10. There are plausible solutions to the CAISO integration costs concerns.

11. The cost concerns should not deter us from moving forward with the adoption of bifurcation.

12. The jurisdictional issue should not prevent the Commission from moving forward with the adoption of bifurcation.

13. The issue of setting resource adequacy capacity for demand response has been and should continue to be resolved in the resource adequacy proceeding.

14. There are several policy issues regarding demand response resource adequacy and bifurcation that must be addressed prior to the implementation of bifurcation, but do not create a barrier to adopting bifurcation.

15. The demand response resource adequacy issues must be resolved prior to full implementation of bifurcation and any new vision for demand response.

16. No party flatly opposes CAISO market integration.

17. Bidding demand response into the CAISO market is a complex process based on multiple factors.

18. Bidding demand response into the CAISO market has been an objective of the Commission since the initiation of Rulemaking 07-01-041 in 2007.

19. The Commission has moved forward with directing the utilities to revise their tariffs to allow retail customers to bid demand response into the CAISO market and authorized the utilities to bid demand response into the market.

20. Very little demand response capacity has been integrated into the CAISO energy markets to date.

21. The recommendation of a demand response auction mechanism is a good starting point for exploration and discussion.

Conclusions of Law

1. It is reasonable to approve the bifurcation of demand response programs.

2. It is reasonable to revise the proposed terminology for bifurcation and improve the definitions in order to eliminate confusion.

3. It is appropriate to use the terms, Load Modifying Resource and Supply Resource, for categorizing demand response programs.

4. It is reasonable to define the bifurcation terms to align with the requirements or purposes of demand response programs.

5. It is reasonable to adopt the following definitions for bifurcating the demand response programs: Load Modifying Resource demand response reshapes or reduces the net load curve and Supply Resource demand response is integrated into the CAISO market.

6. It is reasonable to explore the idea of a demand response auction mechanism in this proceeding.

O R D E R

IT IS ORDERED that:

1. The bifurcation of current demand response programs into load modifying resource and supply resource is adopted. Operational bifurcation will occur beginning with the 2017 demand response program year.

2. Load modifying resources are defined as resources that reshape or reduce the net load curve.

3. Supply resources are defined as resources that are integrated into the California Independent System Operators energy markets.

4. Rulemaking 13-09-011 remains open to consider remaining Phase Two issues as well as issues in Phases Three and Four.

This order is effective today.

Dated _____, at San Francisco, California.